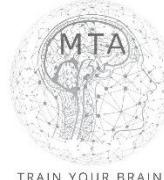


Dental Anatomy lec 2

Numbering Systems, Crown & Roots And Tooth Surfaces



Lecture	Dates	Subject
Lec. 1		Introduction
Lec. 2		Numbering systems, crown & roots and tooth surfaces
Lec. 3		Anatomical Landmarks
Lec. 4		Permanent Incisors (Permanent Maxillary Central Incisor)
Lec. 5		Maxillary Lateral Incisor
Lec. 6		Permanent Canines
Lec. 7		Permanent Maxillary Premolars
Lec. 8		Permanent Maxillary Molars (Maxillary First Molar)
Lec. 9&10		Permanent Maxillary Second & Third Molars

Numbering Systems

1. Universal notation system:

2. Palmer Notation System:



1- Universal Notation System:

A. Permanent Teeth:

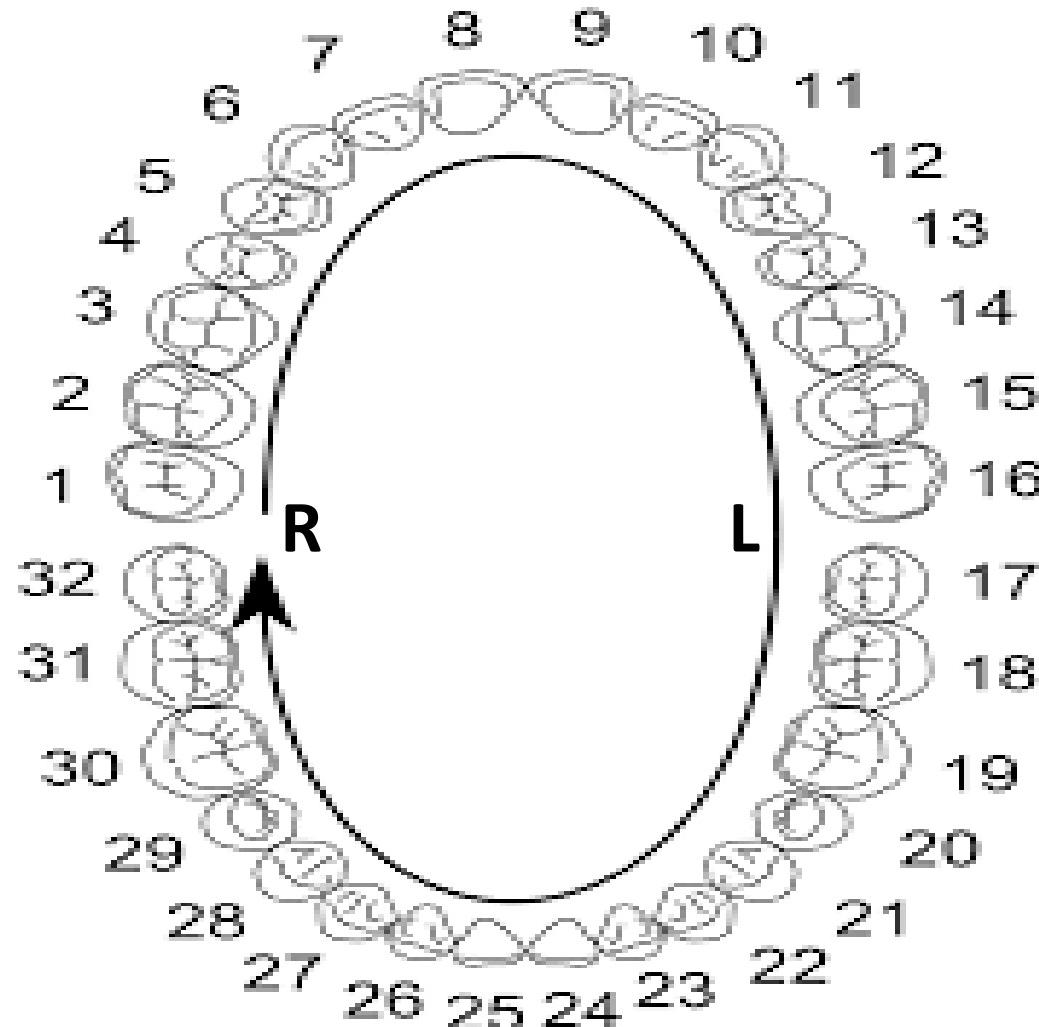
We use numbers from 1 through 32.

- The maxillary teeth are numbered 1 to 16, beginning with the **right third molar**.
- The mandibular teeth are numbered from 17 to 32 beginning with the **left third molar**.

Examples:

#8: Permanent Maxillary Right Central.

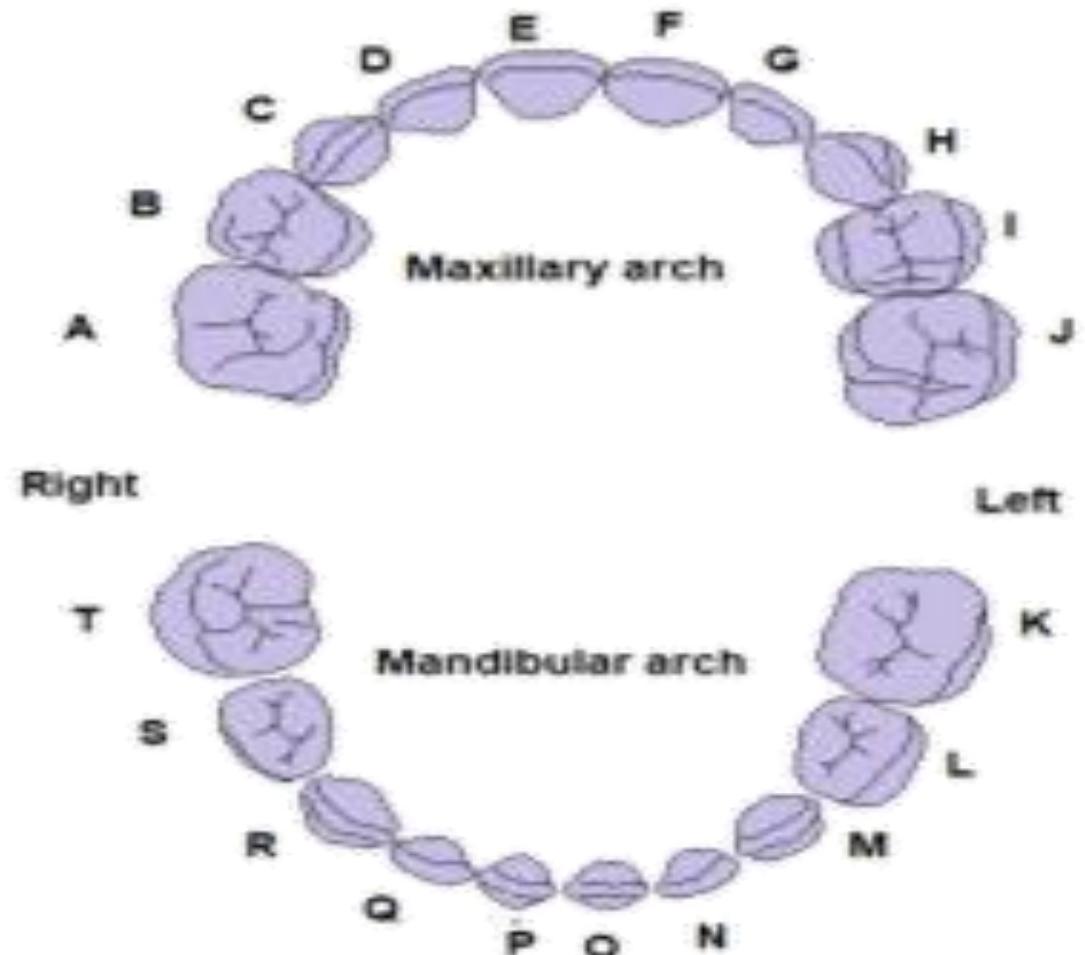
#22: Permanent Mandibular Left Canine.



1- Universal Notation System:

B. Deciduous Teeth:

We use Letters from A through T.



Examples:

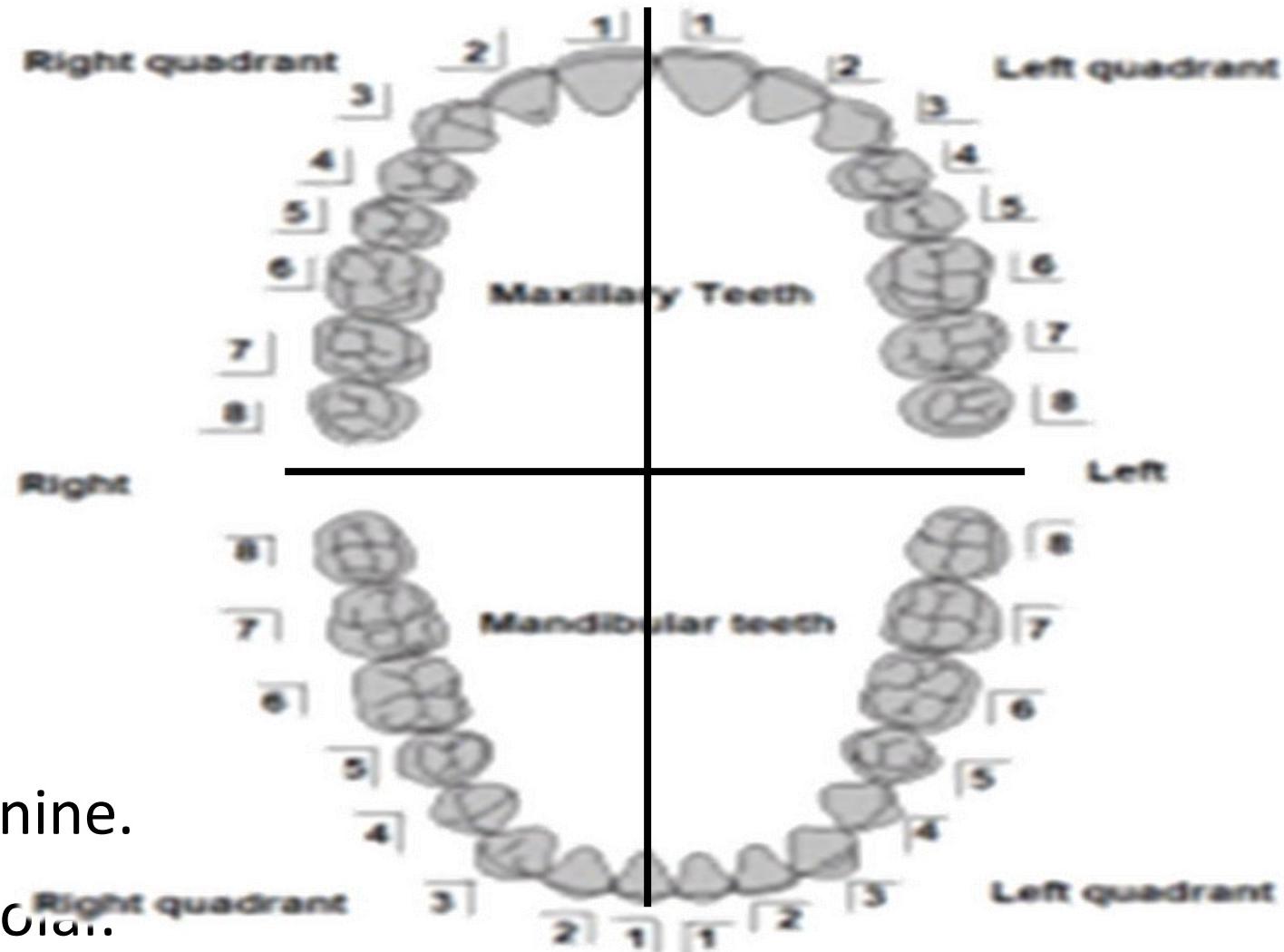
#C: Deciduous Maxillary Right Canine

#T: Deciduous Mandibular Left Third Molar

2- Palmer Notation System:

We divide the teeth to **4 quadrants**.

A. Permanent Teeth:



Examples:

3 : Permanent Mandibular left Canine.

8 : Permanent Maxillary Left 3rd Molar.

2- Palmer Notation System:

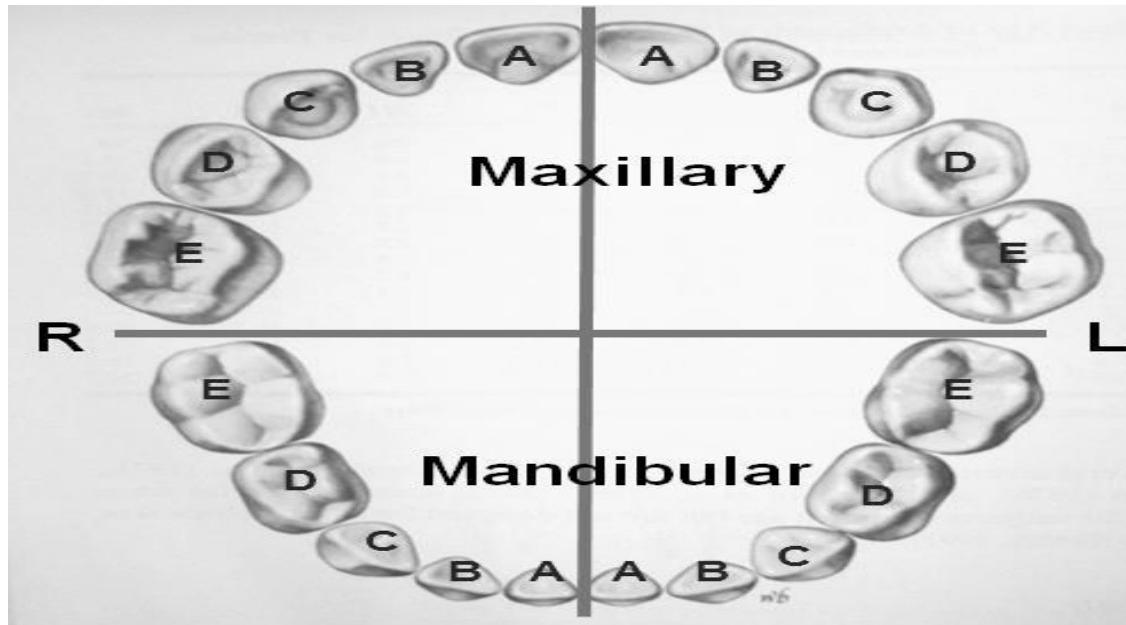
We divide the teeth to **4 quadrants**.

A. Deciduous Teeth:

Examples:

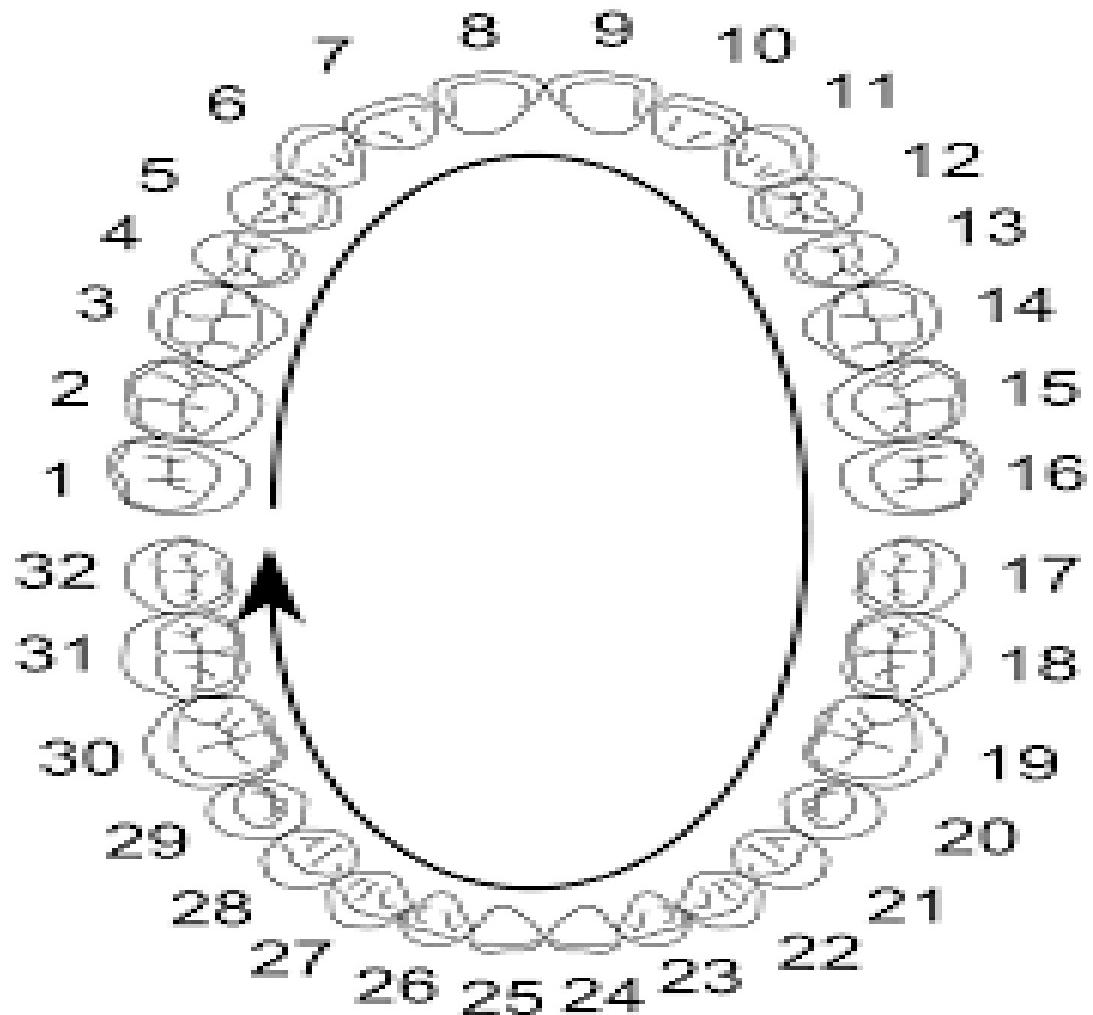
3 : : Permanent Mandibular left Canine.

5 : : Permanent Maxillary Left 3rd Molar.



EDCBA	ABCDE
EDCBA	ABCDE

1- Universal:



2- Palmer:

**Maxillary
Right**



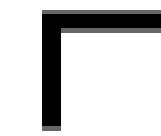
**Mandibular
Right**



**Maxillary
Left**



**Mandibular
Left**



Crown and Root

Each tooth has a crown and root.

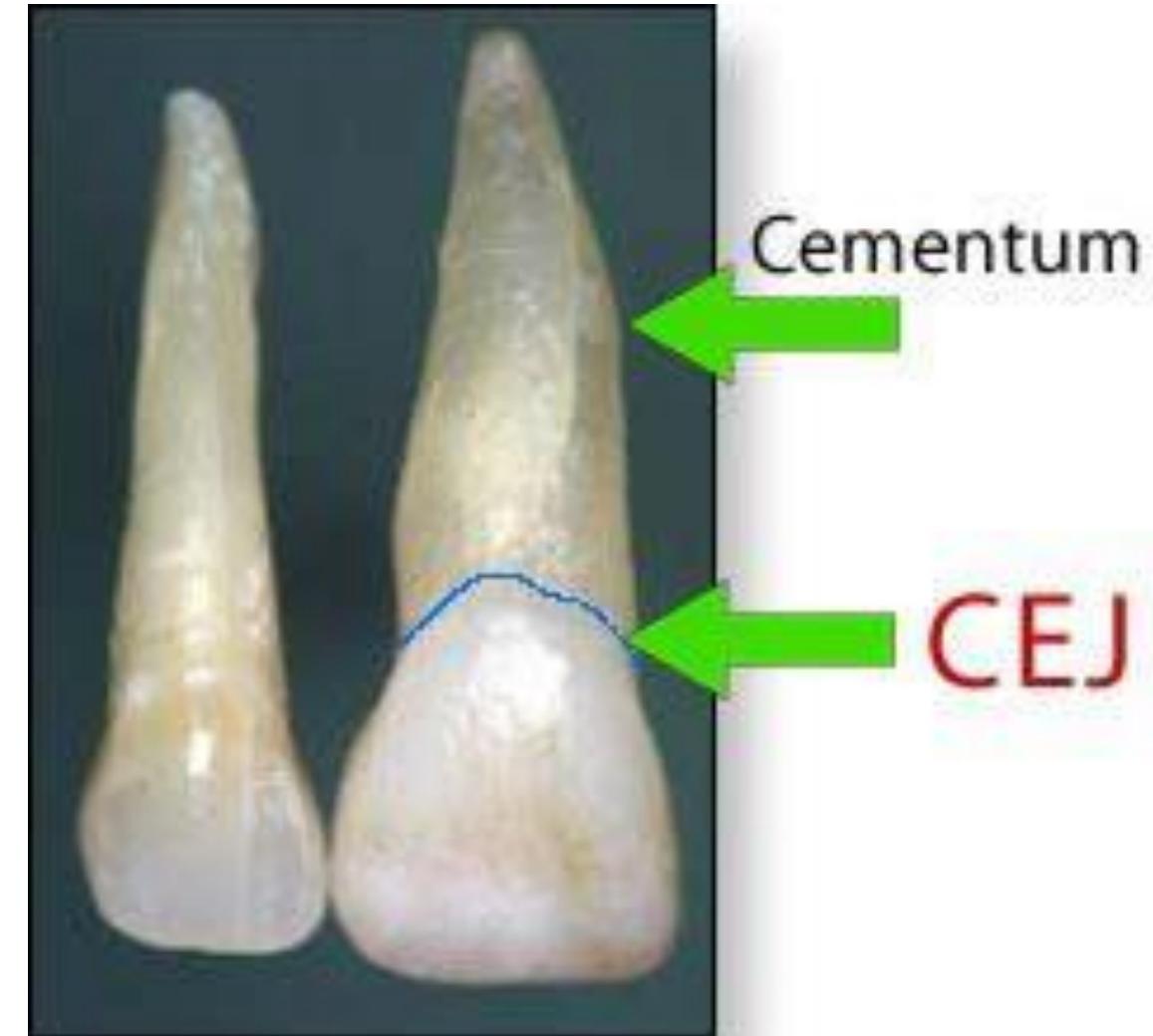
The **crown** is covered with **enamel**.

The **root** is covered with **cementum**.

They join at the **cemento-enamel junction** (CEJ) or **cervical line**.

The enamel, cementum and dentin are the hard tissues of the tooth.

The major bulk of the tooth is dentin.

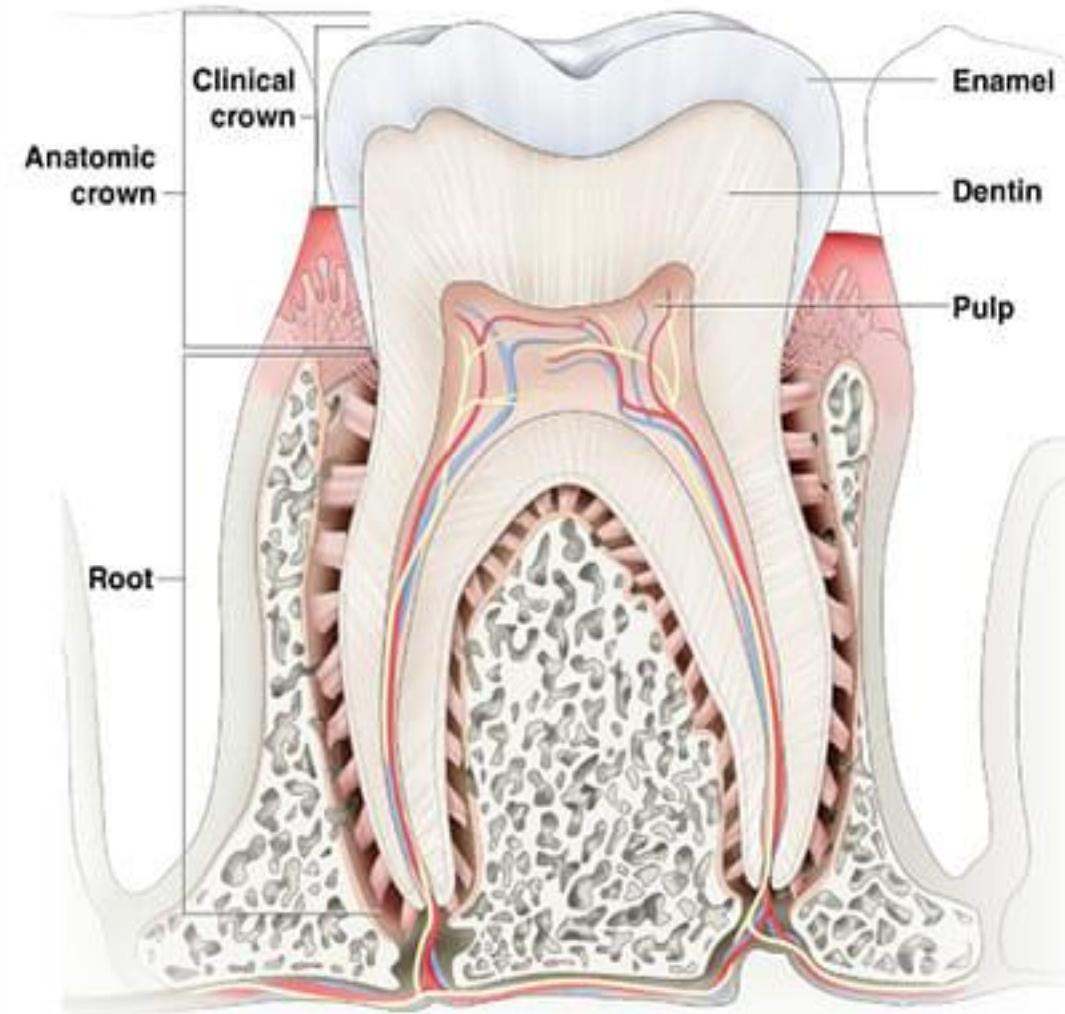


Dental pulp: is the soft tissue of the tooth and present in the pulp chamber and pulp canal.

And it is divided into:

1- Pulp chamber: is the part of dental pulp in the crown.

2- Pulp canal: is the part of dental pulp in the root.

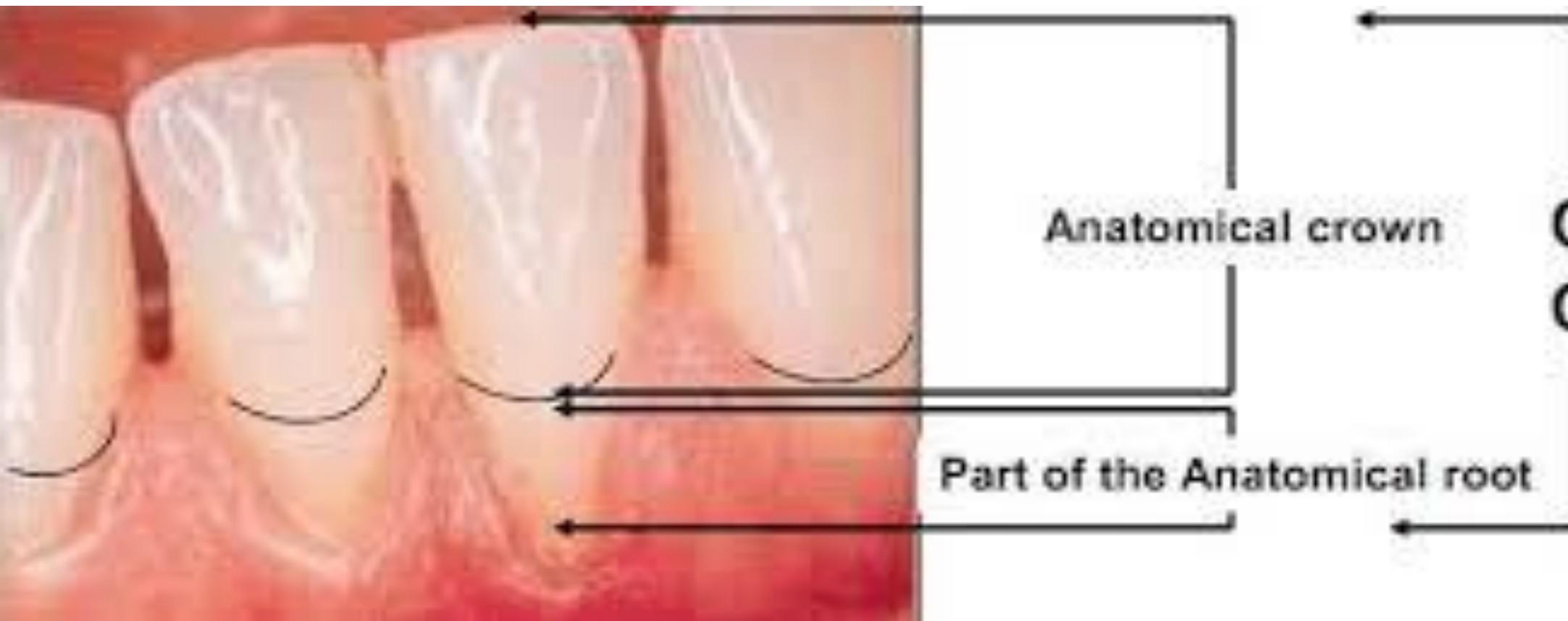


Anatomical crown: is the portion of the tooth which is covered by enamel.

Clinical crown: is the portion of the tooth which is visible in the mouth.

In healthy person, the **anatomical crown** is **larger** than the clinical crown.





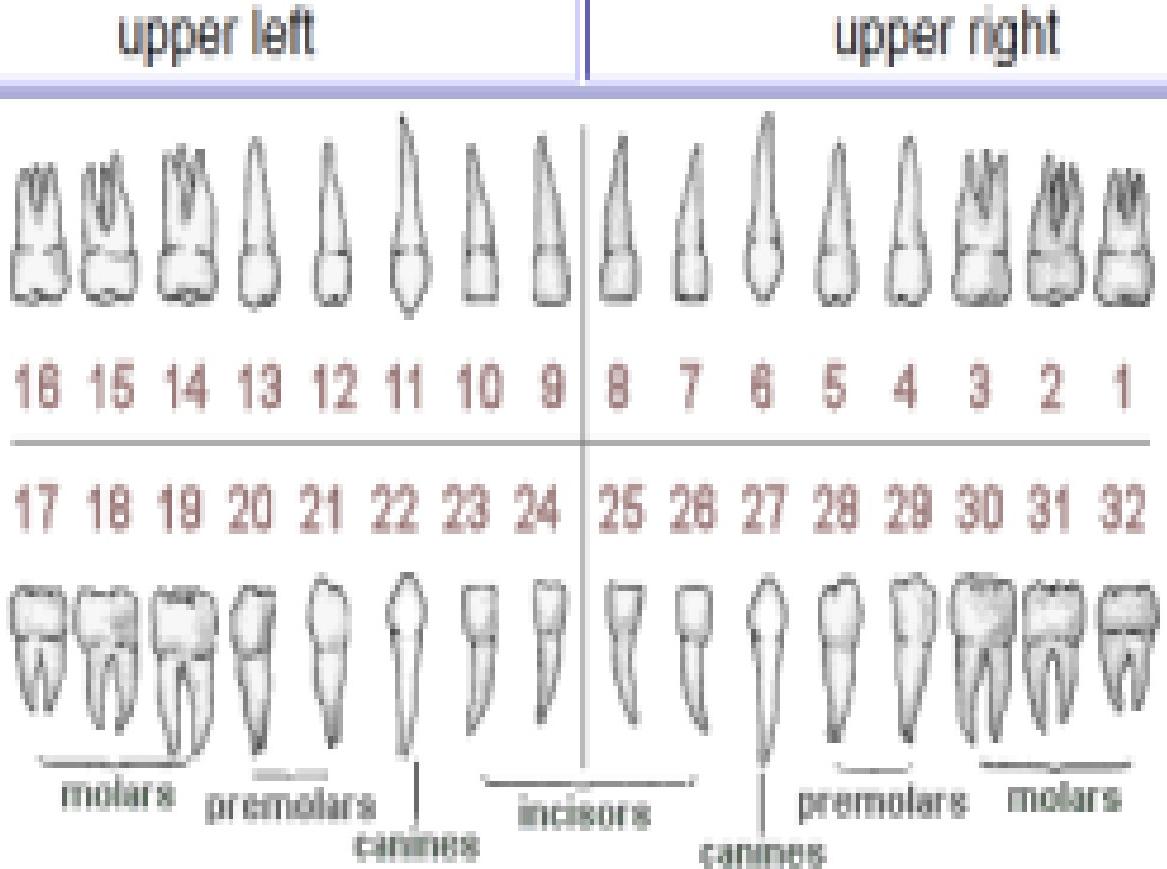
The Number of Roots:

1. Single root: in all anterior teeth, mandibular premolars and maxillary second premolar.

2. Two roots with bifurcation: in mandibular molars and maxillary first premolar.

3. Three roots with trifurcation: in maxillary molars.

Universal tooth numbering system
Teeth numbering chart for adult teeth

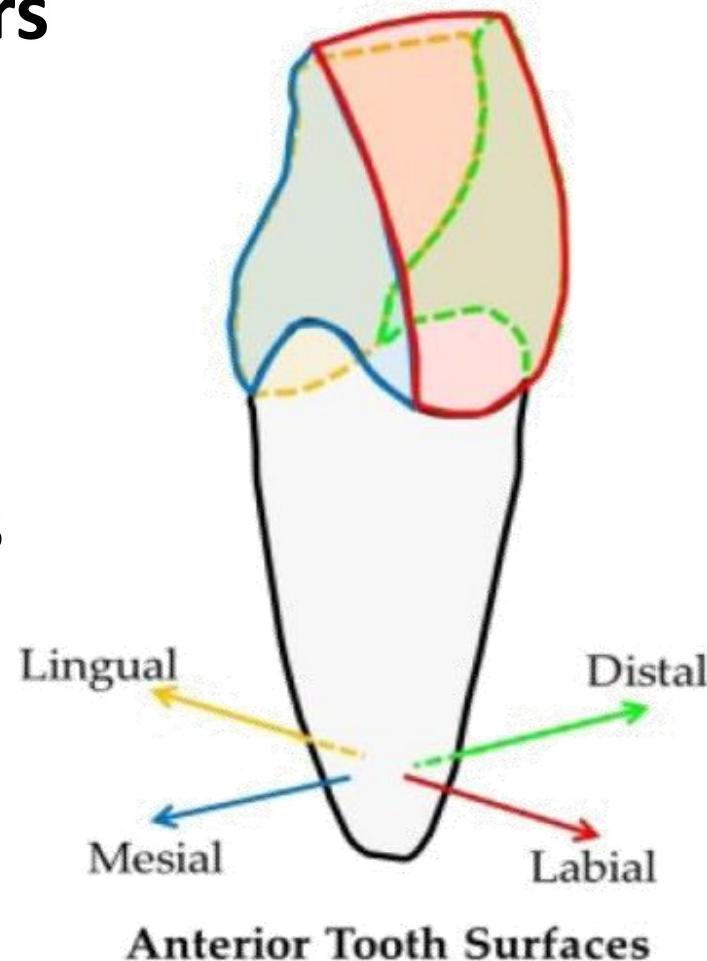


lower left

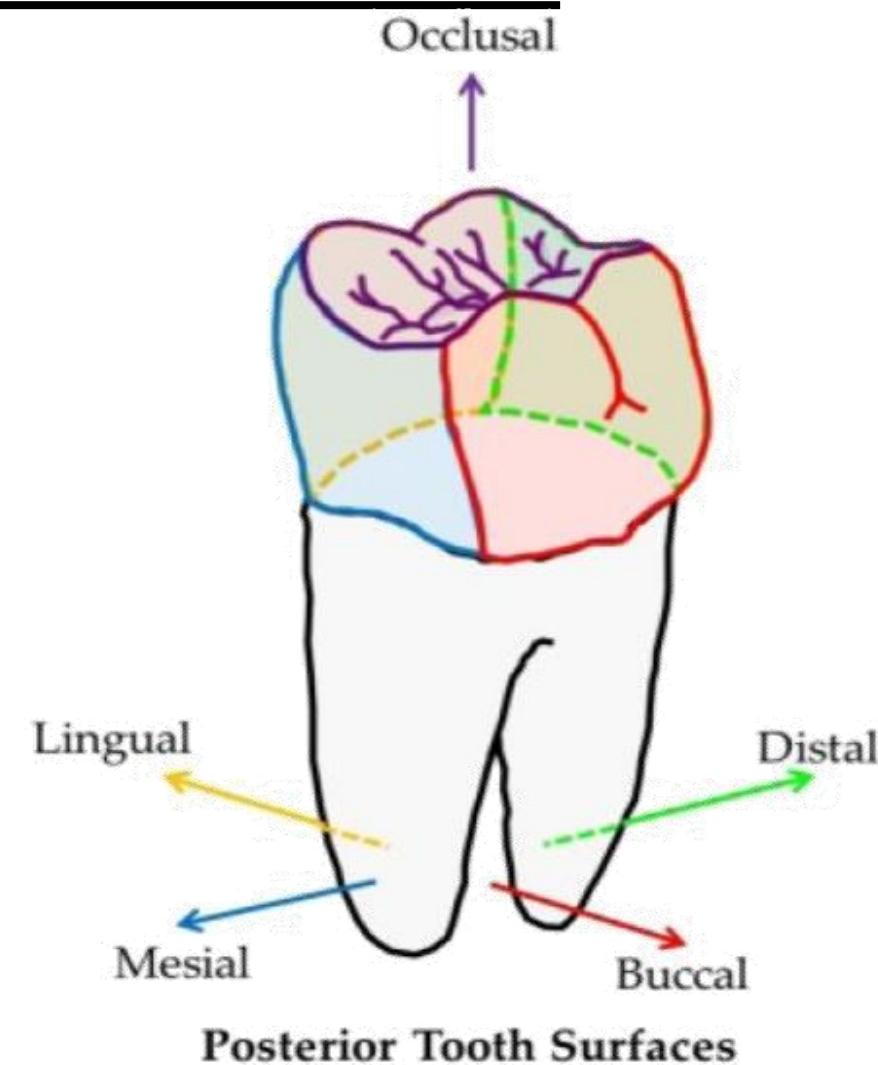
lower right

Surfaces and Ridges

- The crowns of **incisors** and **canines** have **4 surfaces** and a ridge.



- The crowns of the **premolars and molars** have **5 surfaces**.



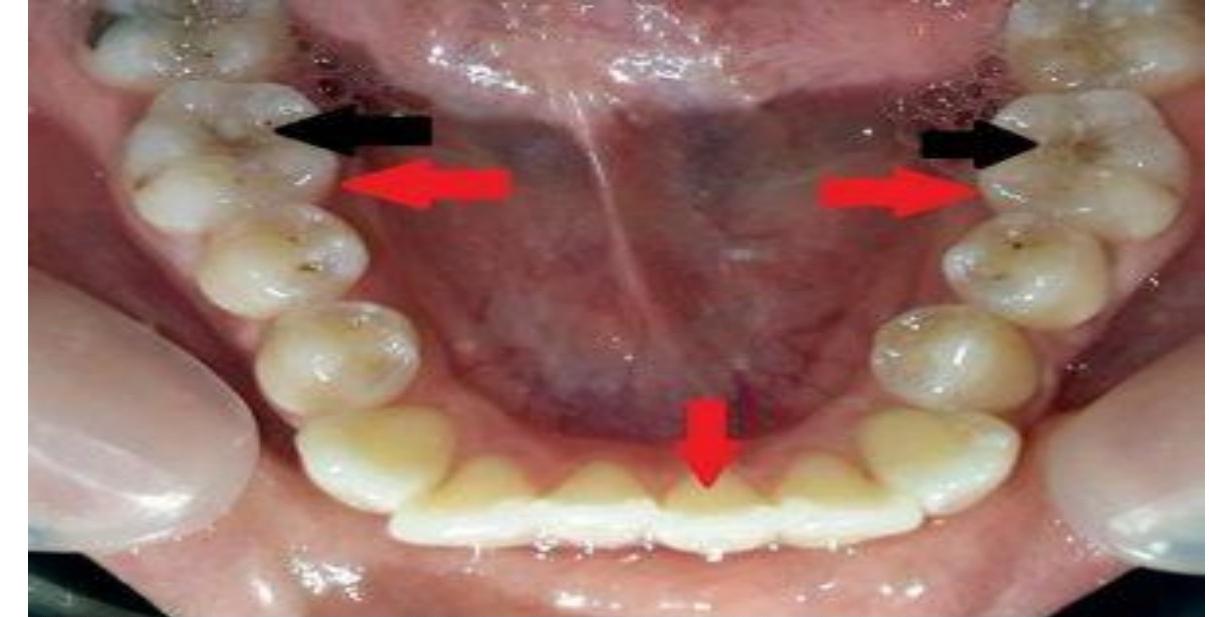
1) Labial surface: is the surface which is towards the **lip** in incisors and canines (= in **anterior teeth**).

2) Buccal surface: is the surface which is towards the **cheek** in premolars and molars (= in **posterior teeth**).

The labial and buccal surfaces could be termed as the "**Facial**" surfaces.

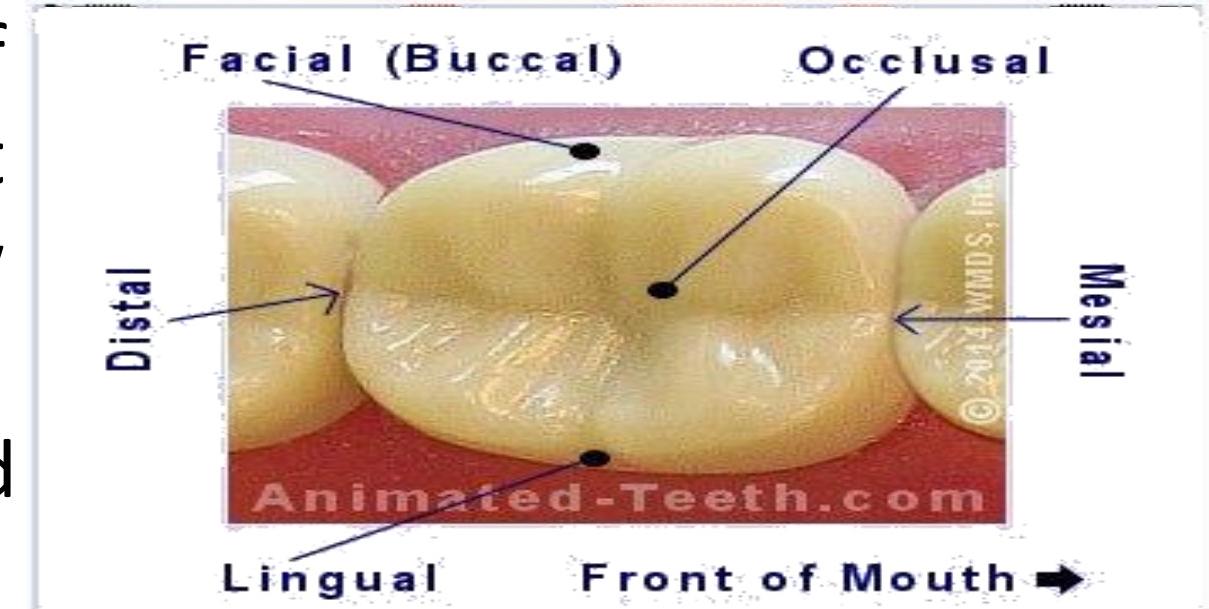


3. Lingual surface: is the surface which is facing the tongue (all teeth).



4. Occlusal surface: is the surface of the posterior teeth coming in contact with the teeth in the opposite jaw during closing the mouth.

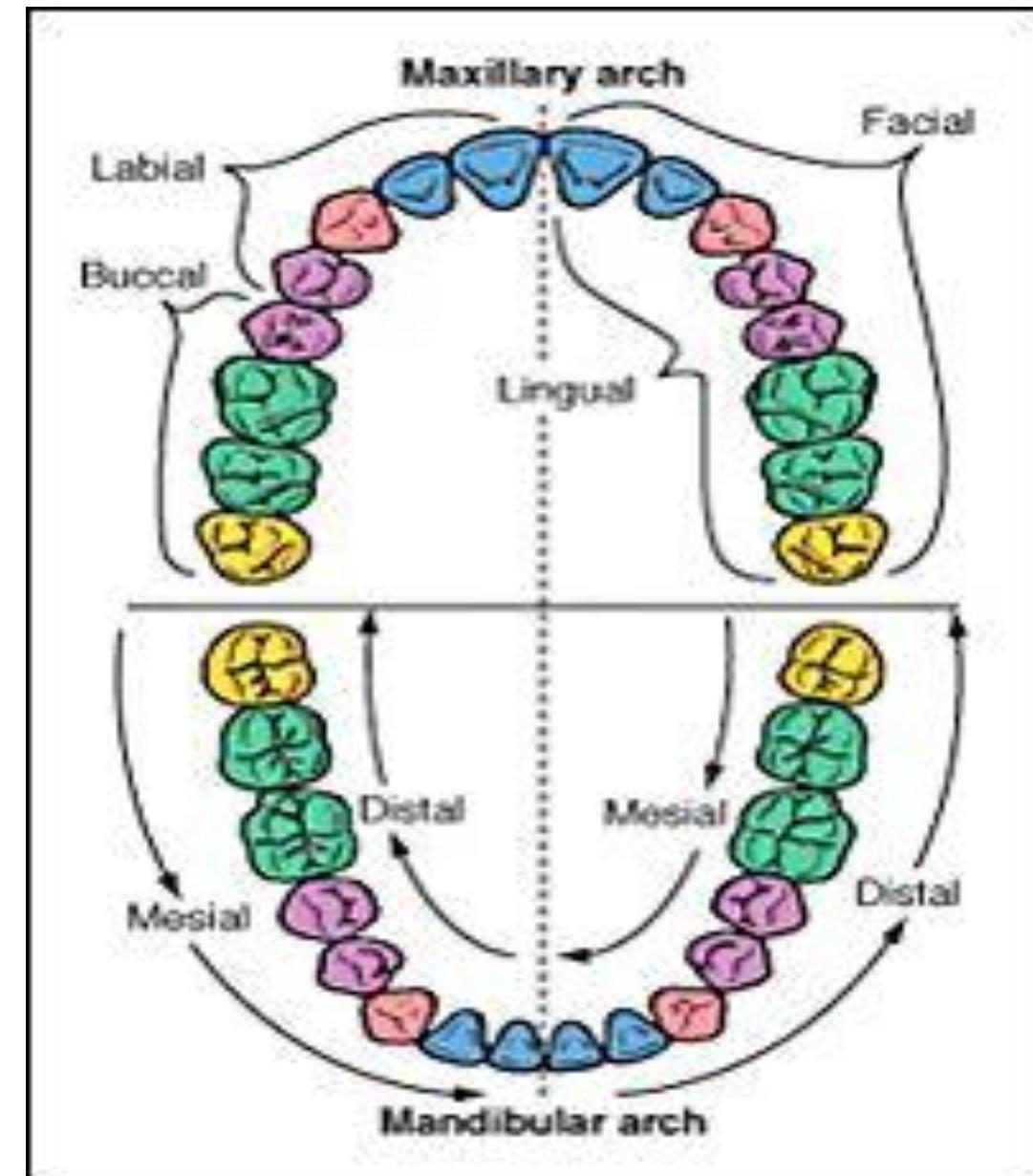
- In anterior teeth, this surface is called "Incisal ridge".



5. Proximal surface: is the surface of the tooth facing towards adjacent teeth in the same dental arch.

- a. **Mesial surface:** is the surface which is facing **towards the median line**.
- b. **Distal surface:** is the surface which is facing **away from the median line**.

- All teeth have their mesial surfaces touching the distal surfaces of the adjacent tooth except the maxillary and mandibular central incisors (both permanent and deciduous).

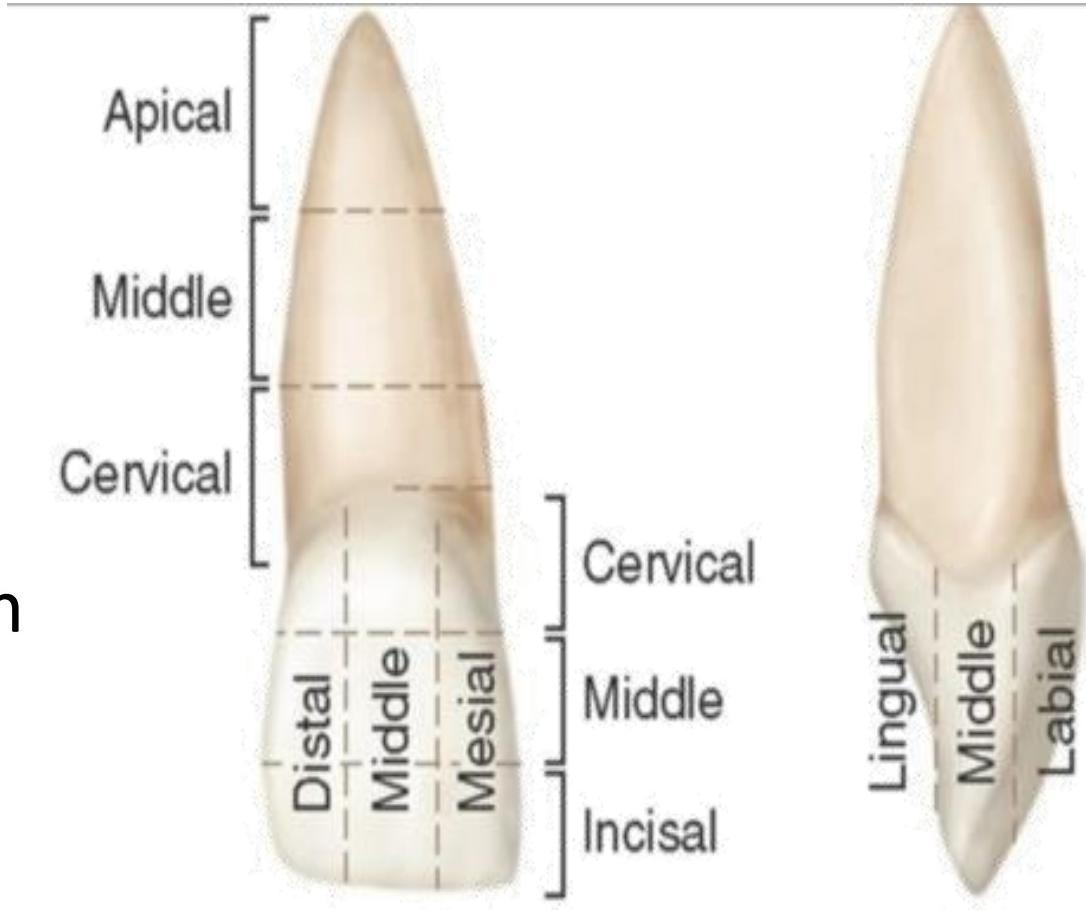


Division of the crown into thirds:

For description, the crown and the root are divided into thirds according to the position of the surface.

Line angle: it is formed by the junction of 2 surfaces and gets its name from these surfaces. Example: mesio-labial line angle.

Point angle: it is formed by the junction of 3 surfaces and gets its name from these surfaces. Example: mesio-labio-incisal point angle



Quiz !!

التالي

سابق

السؤال 6
1 نقاط

: Buccal surface: is the surface which is towards the cheek in premolars and molars in

anterior teeth .A

posterior teeth .B

both of them .C



TRAIN YOUR BRAIN



Pulp canal: is the part of dental pulp in the crown of the tooth



الذهاب

سباق

السؤال 9
نقطة 1

: is #29 -

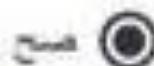
.Permanent Mandibular Right Second Premolar .A

.Permanent Mandibular left Second Premolar .B

.Permanent maxillary left first Premolar .C



Point angle: it is formed by the junction of 3 surfaces and gets its name from these surfaces



 التالي

سابق

: Two roots with bifurcation

.in mandibular molars and maxillary first premolar .A

.in maxillary molars and mandibular first premolar .B

both of them .C

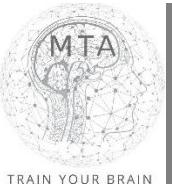


: D is#

.Deciduous Maxillary Right Lateral Incisor .A

.Deciduous Maxillary Right canine .B

.Deciduous Maxillary left canine .C



: The root is covered with

enamel .A

dentin .B

none of them .C



Thank you

